



Complete Summary

GUIDELINE TITLE

Upper extremity (shoulder and elbow).

BIBLIOGRAPHIC SOURCE(S)

Expert Clinical Benchmarks. Upper extremity (shoulder and elbow). King of Prussia (PA): MedRisk, Inc.; 2004. 56 p.

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

METHODOLOGY - including Rating Scheme and Cost Analysis

RECOMMENDATIONS

EVIDENCE SUPPORTING THE RECOMMENDATIONS

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

IMPLEMENTATION OF THE GUIDELINE

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT

CATEGORIES

IDENTIFYING INFORMATION AND AVAILABILITY

SCOPE

DISEASE/CONDITION(S)

Work-related upper extremity (shoulder and elbow) injury

GUIDELINE CATEGORY

Treatment

CLINICAL SPECIALTY

Chiropractic

Family Practice

Orthopedic Surgery

Physical Medicine and Rehabilitation

INTENDED USERS

Physical Therapists
Physicians
Utilization Management

GUIDELINE OBJECTIVE(S)

To offer evidence-based ranges of appropriate treatment of workers' compensation conditions

TARGET POPULATION

Workers with functional impairment due to work-related upper extremity (shoulder and elbow) injury

INTERVENTIONS AND PRACTICES CONSIDERED

1. Activities of daily living (ADL) training (home)
2. Biofeedback
3. Body mechanics and postural stabilization
4. Compression therapies
5. Cryotherapy
6. Device and equipment use and training (work)
7. Electrical stimulation
8. Electrotherapeutic delivery of medications
9. Flexibility exercises
10. Functional training programs (home and work)
11. Instrumental ADL (IADL) training (home and work)
12. Injury prevention and reduction (home and work)
13. Leisure and play activities and training (work)
14. Mobilization/manipulation
15. Neuromotor development training
16. Passive range of motion
17. Sound agents
18. Strength, power, and endurance training
19. Supportive devices
20. Thermotherapy

MAJOR OUTCOMES CONSIDERED

- Pain relief
- Functional status
- Range of motion

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

During 2001, the guideline developers began to formally collect and archive systematic reviews and other studies, using the Cochrane Collaboration and the PEDro systematic review methodology.

During the comprehensive medical literature review, preference was given to high quality systematic reviews, meta-analyses, and clinical trials over the past ten years, plus existing nationally recognized treatment guidelines from the leading specialty societies.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus
Expert Consensus (Committee)
Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Expert Clinical Benchmark (ECB) System for Grading of Evidence

I - Evidence from at least 1 properly randomized controlled trial (RCT)

II-1 - Evidence from well-designed controlled trials without randomization

II-2 - Evidence from well-designed cohort or case-control analytic studies, preferably from more than 1 center or research group

II-3 - Evidence from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments could also be included here.

III - Opinions of respected authorities, based on clinical experience, descriptive studies or reports of expert committees

Adapted from: Sackett D. Rules of evidence and clinical recommendations for the management of patients. Can J Cardiol 1993; 9:487-9.

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review
Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus
Expert Consensus (Consensus Development Conference)

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Expert Clinical Benchmark (ECB) System for Grading of Recommendations

A - Good evidence to support the recommendation that the intervention be specifically considered

B - Fair evidence to support the recommendation that the intervention be specifically considered

C - Poor evidence regarding inclusion or exclusion of an intervention, but recommendations may be made on other grounds

Adapted from: Sackett D. Rules of evidence and clinical recommendations for the management of patients. Can J Cardiol 1993; 9: 487-9.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Clinical Validation-Pilot Testing
Clinical Validation-Trial Implementation Period
Comparison with Guidelines from Other Groups
External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The guideline developers, where appropriate, compared specific body part musculoskeletal dysfunction to existing United Kingdom and Dutch treatment guidelines.

Beginning in 2001, the guidelines were also compared to actual practice patterns in 120,000 workers' compensation claims (MedRisk, Inc) to determine their reasonableness of fit within the realm of clinical practice.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

General

1. During the initial evaluation, the therapist should include questions about work task requirements in the patient history interview and incorporate these findings in the treatment objectives.
2. The therapist's treatment regimen should be directed toward improving the patient's functional ability rather than based on the patient's impairment.
3. The therapist's treatment regimen should emphasize active interventions over passive modalities and should become less frequent toward the end of the episode of care in order to encourage patient behavioral gains.

Non-Surgical

For non-surgical upper extremity (shoulder and elbow) conditions, a series of physical therapy treatments should be delivered ranging from 10 to 20 visits over a period of 6 to 12 weeks, depending upon severity (see table below). Refer to the original guideline document for recommendations on the time, choice, and sequence of interventions, as well as interventions that are generally recommended, interventions recommended on a case specific/clinical judgement basis, and interventions that are not recommended. Specific interventions are listed in the "Interventions and Practices Considered" field in the Complete Summary.

Surgical

For surgical upper extremity (shoulder and elbow) conditions, a series of physical therapy treatments should be delivered ranging from 20 to 36 visits over a period of 10 to 18 weeks, depending upon severity (see table below). Refer to the original guideline document for recommendations on the time, choice, and sequence of interventions, as well as interventions that are generally recommended, interventions recommended on a case specific/clinical judgement basis, and interventions that are not recommended. Specific interventions are listed in the "Interventions and Practices Considered" field in the Complete Summary.

Pre-Cert Product Treatment Patterns -- No Regional Adjustments

	Surgical			Non-Surgical		
	Total Visits	Sequence of Visits	Total # Weeks	Total Visits	Sequence of Visits	Total # weeks
Acute/Non-delayed						

	Surgical			Non-Surgical		
	Total Visits	Sequence of Visits	Total # Weeks	Total Visits	Sequence of Visits	Total # weeks
Non-complicated	20	3V @ 2 wks 2V @ 6 wks 1V @ 2 wks	10 weeks	10	2V @ 4 wks 1V @ 2 wks	6 weeks
Complicated	32	3V @ 4 wks 2V @ 9 wks 1V @ 2 wks	15 weeks	18	2V @ 8 wks 1V @ 2 wks	10 weeks
Acute Delayed						
Complicated	32	3V @ 3 wks 2V @ 10 wks 1V @ 3 wks	16 weeks			
Chronic/Non-delayed						
Non-complicated	20	3V @ 2 wks 2V @ 6 wks 1V @ 2 wks	10 weeks	10	2V @ 4 wks 1V @ 2 wks	6 weeks
Complicated	36	3V @ 4 wks 2V @ 10 wks 1V @ 4 wks	18 weeks	20	2 V @ 8 wks 1V @ 4 wks	12 weeks
Chronic Delayed						

	Surgical			Non-Surgical		
	Total Visits	Sequence of Visits	Total # Weeks	Total Visits	Sequence of Visits	Total # weeks
Complicated	36	3V @ 3 wks 2V @ 12 wks 1V @ 3 wks	18 weeks			

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The recommendations were based primarily on a comprehensive review of published reports. In cases where the data did not appear conclusive, recommendations were based on the consensus opinion of the group.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

These guidelines provide detailed direction on the time, choice, and sequence of physical therapy services directed toward recovery of functional ability and return to work.

POTENTIAL HARMS

Not stated

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Expert Clinical Benchmarks. Upper extremity (shoulder and elbow). King of Prussia (PA): MedRisk, Inc.; 2004. 56 p.

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2004

GUIDELINE DEVELOPER(S)

Expert Clinical Benchmarks - Private For Profit Organization

SOURCE(S) OF FUNDING

Expert Clinical Benchmarks

GUIDELINE COMMITTEE

Not stated

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

The Expert Clinical Benchmarks (ECB) Physical Therapy Clinical Guidelines are available in electronic form to subscribers from the [Expert Clinical Benchmarks Web site](#).

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on January 11, 2005. The information was verified by the guideline developer on January 21, 2005.

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